

EVIDENCE MAP OF COST-BENEFIT, COST-EFFECTIVENESS AND COST-UTILITY MODELS IN DEMENTIA PUBLISHED SINCE 1960

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Objectives

To create an evidence map of studies reporting cost-benefit, cost-effectiveness or cost-utility models for dementia, and the geographical jurisdictions for which these studies were conducted.

Methods

We searched the heoro.com database (www.heoro.com) for cost-benefit, cost-effectiveness or cost-utility modelling studies in dementia that were published between 1960 and 30th May 2017. We analysed the abstracts identified by the search to determine the different types of interventions modelled across the range of geographical locations, by date and type of dementia. We presented the findings as an evidence map.

Map of locations by type of dementia

	Any dementia	Alzheimer's	Lewy Body	Vascular	Parkinson's	CJD
Australia	2	0	0	0	0	0
Belgium	1	0	0	0	0	0
Canada	2	2	0	1	1	0
Finland	2	2	0	0	0	0
France	1	2	0	0	0	0
Germany	0	2	0	0	0	0
Indonesia	1	0	0	0	0	0
International	7	18	0	1	0	1
Ireland	0	0	0	0	0	1
Korea	0	1	0	0	0	0
Netherlands	12	2	0	0	0	0
Norway	0	1	0	0	0	0
Spain	0	1	0	0	0	0
Sweden	3	3	0	0	0	0
Switzerland	0	1	0	0	0	0
Taiwan	0	1	0	0	0	0
UK	20	19	2	2	2	0
USA	6	10	0	0	0	0
Unknown	3	1	0	0	0	0

Map of interventions by type of dementia

	Any dementia	Alzheimer's	Lewy Body	Vascular	Parkinson's	CJD
Behavioural therapies	2	2	0	1	0	0
Cognitive therapies	7	3	1	1	1	0
Care and Support	21	7	0	0	0	0
Deep brain stimulation	0	2	0	0	0	0
Disease management	8	1	0	0	0	0
Diagnosis	8	8	0	0	0	0
Memory clinic	2	1	0	0	0	0
Prevention	2	2	0	0	0	2
Antidepressants	1	2	0	0	0	0
Antipsychotics	0	3	0	0	0	0
Any anticholinesterase	2	14	1	1	0	0
Donepezil	1	24	0	1	0	0
Galantamine	0	11	0	1	0	0
Memantine	1	24	0	1	0	0
Rivastigmine	0	11	0	1	1	0
Other/ none /unclear	20	9	0	0	0	0

Map of type of dementia by model type

	Cost-benefit	Cost-effectiveness	Cost-utility	Unclear
Any dementia	2	5	33	20
Alzheimer's	3	3	41	20
Lewy Body	0	0	1	1
Vascular	0	1	1	2
Parkinson's	0	0	1	1
CJD	0	1	0	1

Map of interventions by model type

	Cost-benefit	Cost-effectiveness	Cost-utility	Unclear
Behavioural therapies	0	0	3	1
Cognitive therapies	0	0	7	4
Care and Support	1	1	16	10
Deep brain stimulation	0	0	2	0
Disease management	0	1	4	4
Diagnosis	2	2	11	2
Memory clinic	0	1	3	0
Prevention	1	1	3	1
Antidepressants	0	0	2	1
Antipsychotics	1	0	2	0
Any anticholinesterase	0	0	10	6
Donepezil	0	3	16	8
Galantamine	0	2	8	3
Memantine	0	1	19	6
Rivastigmine	0	2	7	5
Other/ none /unclear	2	2	13	14

Map of type of dementia by publication date

	1960-1999	2000-2004	2005-2009	2010-2014	2015-2017
Any dementia	6	0	13	32	8
Alzheimer's	6	10	22	24	4
Lewy Body	0	0	1	0	1
Vascular	0	0	1	3	0
Parkinson's	0	0	1	0	1
CJD	0	0	1	1	0

Numbers refer to number of studies identified for each category. Where a study is set in two or three locations, these are all listed separately. Studies set in five or more jurisdictions, or systematic reviews are classified as International. Studies are mapped to all relevant subcategories.

Conclusions

The focus on cost-utility models from a societal perspective reflects the high impact of dementia on quality of life of patients and caregivers. This is also shown by the substantial number of models on caregiver support and patient care interventions, as well as drug therapies. The preponderance of studies from the UK may reflect the burden on state-funded social care organisations in this country.